

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

The specification has been amended on pages 1 and 2.

Claims 5 and 9-11 have been cancelled.

New claims 12-15 have been added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-4, 8, and 12-15 are now pending in this application.

Rejections under 35 U.S.C. § 112

Claims 3 and 6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 3 and 6 have been amended to overcome these rejections. Withdrawal of these rejections is respectfully requested.

Rejections under 35 U.S.C. § 102

The various rejections of claims 1-4 under § 102 have been rendered moot by the inclusion into independent claim 1 of the subject matter of claim 5, which was not rejected based on § 102. Withdrawal of these rejections is therefore respectfully requested.

Rejections under 35 U.S.C. § 103

The rejection of claims 1-4 and 6-8 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,386,629 (hereafter "Ouchi") in view of FR 2757258 is also believed to

be moot based on the amendment noted above to claim 1. Withdrawal of this ground of rejection is also respectfully requested.

It is believed that the only ground of rejection remaining for discussion is the rejection previously applied to claims 5 and 9-11 under 35 U.S.C. § 103(a) as being unpatentable over Ouchi in view of FR 2757258 (as applied to claims 1-4 and 6-8), and further in view of DE 198 20 937. This rejection is respectfully traversed, as it may be applied to amended claim 1.

Ouchi discloses a heat exchanger tube 1 that includes curved lugs 6 on the upper plane wall 2 and lower plane wall 3 of the tube 1. See Ouchi at col. 4, lines 45-50. Ouchi discloses that the plane walls 2, 3 form lateral ends that are abutted at point 5 and welded together. See Ouchi at col. 4, lines 41-45. However, Ouchi does not disclose or suggest a multi-chamber tube "...wherein the webs are formed from only one longitudinal face of the multi-chamber tube." Furthermore, Ouchi does not disclose or suggest a multi-chamber tube "...wherein the other longitudinal face is essentially flat; wherein the tube is widened asymmetrically at the end, the longitudinal face having the folded webs remaining essentially unshaped."

FR 2 757 258 discloses a heat exchanger tube that includes partitions made from folds. See abstract of FR 2 757 258. However, FR 2 757 258 does not disclose or suggest a multi-chamber tube "...wherein the other longitudinal face is essentially flat; wherein the tube is widened asymmetrically at the end, the longitudinal face having the folded webs remaining essentially unshaped." Therefore, it would not have been obvious to one of ordinary skill to modify the heat exchanger tube disclosed of Ouchi by the teachings of FR 2 757 258 to make the claimed multi-chamber tube. Nor would one of ordinary skill in the art have had the motivation to make such a modification.

DE 198 20 937 discloses a heat exchanger tube 2 in which ends 4 of the tube 2 are expanded. See abstract and Figure 2 of DE 198 20 937. However, the tube 2 disclosed by DE 198 20 937 is formed by butting lips 6 and soldering the lips 6 together to form a seam on one of the longitudinal faces of the tube 2. See abstract and Figure 2 of DE 198 20 937. On the other hand, Ouchi discloses a tube that has a seam arranged on the narrow face of the tube, as shown in Figure 1 of Ouchi and noted on page 4 of the Office Action. FR 2 757 258

also discloses a tube with a seam arranged on the narrow face of the tube, as shown in Figure 2. DE 198 20 937 does not disclose or suggest that its expansion process can or should be used for a tube that has a seam arranged on the narrow face of the tube.

DE 198 20 937 further discloses that that the ends 4 of the tube 2 are expanded on the side away from the lip 6. See abstract of DE 198 20 937. Figure 1 of DE 198 20 937 indicates that the longitudinal face opposite lip 6, as well as the narrow faces of the tube 2, are deformed and expanded when the ends 4 of the tube are expanded. A seam that is located on one of the narrow faces of a tube, as disclosed by Ouchi and FR 2 757 258, will be subject to stress during the expansion method disclosed by DE 198 20 937. DE 198 20 937 does not disclose or suggest that its expansion method can be used for a tube that has a seam arranged on the part of the tube that is deformed, particularly not on the narrow face of the tube. Not only does DE 198 20 937 not expressly disclose or suggest that this expansion method will be successful with a tube that has a seam arranged on the narrow face of the tube, but the reference clearly leads the person skilled in the art to believe that it will not work for such a tube. Furthermore, DE 193 20 937 only regards tubes with a soldered seam rather than a welded seam, as recited in claim 1, i.e., which are not suitable for seams at the narrow ends of tubes.

It would not have been obvious to one of ordinary skill in the art to have modified the tube of Ouchi and FR 2 757 258 by the teachings of DE 193 20 937, because DE 193 20 937 does not disclose that its expansion method can be used with a tube that has a seam located on the narrow face of the tube. Furthermore, because the expansion process disclosed by DE 193 20 937 would deform and stress the narrow faces of a tube, there is no reasonable expectation of success that using the expansion method of DE 198 20 937 would have successfully expanded the tube of Ouchi and FR 2 757 258 without rupturing a seam located on the narrow face of the tube. See M.P.E.P. § 2143.02. In light of the differences between the tubes used by Ouchi, FR 2 757 258, and DE 198 20 937 and the lack of a reasonable expectation of success, one of ordinary skill in the art would not have been motivated to modify the tube of Ouchi and FR 2 757 258 by the teachings of DE 198 20 937. Withdrawal of this rejection is respectfully requested.

The remaining dependent claims are believed to be patentable for at least the reasons set forth above with respect to claim 1.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

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